

# TB CARE I

## **TB CARE I - Zambia**

Year 2
Quarterly Report
October-December 2012

**January 30, 2013** 

### **Quarterly Overview**

Reporting Country	Zambia
Lead Partner	FHI360
<b>Collaborating Partners</b>	KNCV, MSH, WHO
Date Report Sent	
From	Seraphine Kaminsa Kabanje
То	George Sinyangwe
Reporting Period	October-December 2012

Technical Areas	%
	Completion
1. Universal and Early Access	47%
2. Laboratories	73%
3. Infection Control	71%
4. PMDT	75%
5. TB/HIV	96%
6. Health Systems Strengthening	100%
7. M&E, OR and Surveillance	92%
8. Drug supply and management	100%
Overall work plan completion	82%

#### **Most Significant Achievements**

**Universal access:** The Patient Centered Approach (PCA) initiative is being implemented in North Western province in three districts namely Solwezi, Kabompo and Mwinilunga. TB CARE I staff members participated in the collection of baseline data in three districts, with two consultant facilitators and 15 research assistants from October 15-27, 2012. The initiative has three main phases that include a baseline survey, the implementation of PCA tools and an endline survey. A quantitative survey questionnaire was administered in all three districts of Kabompo, Mwinilunga and Solwezi and qualitative in-depth interviews were conducted in two districts. This data will provide information on the current health needs and preferences from a patient perspective.

**Laboratory:** Implementation of the national courier system began with a baseline assessment in four selected pilot provinces of Central, Eastern, Copperbelt and Northern provinces for a total of 24 districts in 60 health facilities. A team of Ministry of Health and TB CARE I laboratory staff conducted a baseline assessment using three structured questionnaires. Interviews were administered face to face to clinical managers of one MDR-TB facility in the Copperbelt province, laboratory staff, other hospital staff members, Provincial Medical Officers and District Medical Officers. A total of 84 respondents participated in the interviews. Additional data was collected by observation of activities during the site visits. The data included the number of smears examined by province, number of positive smears and new patients with positive TB smears in the four pilot provinces. 30,636 smears were examined of which 4,171 were positive. The Copper belt province had the highest number of smears done (13,451) and smear positive results (2,045). *Refer to photo album*. The baseline assessment is part of the sputum specimen referral system planned for country scale-up.

KNCV laboratory consultant Valentina Anisimova provided technical support to the Tropical Diseases Research Centre (TDRC) in October 2013 to strengthen capacity of the Tropical Disease Research Center (TDRC) in TB culture/drugs susceptibility testing (DST) laboratory through detailed assessment and technical assistance to help build quality management systems (QMS).

**TB IC:** The Ndola District TB IC demonstration site project received approval for \$98,650 in core funding, for project continuation for one year from October 2012. Focus activities include the review and inclusion of IC activities in the facility planning cycle of 2013-2014. Other activities that will be implemented include the screening of health care workers for TB and HIV, use of smartphone technology in the FAST strategy and end-evaluation of project successes. Three poster presentations on some achievements from the TB IC demonstration project were made at the Infection Control Africa Network conference (ICAN) conference held in Cape Town, South Africa from November 26-29, 2012.

TB CARE I also supported training of 48 community volunteers (28 females, 20 males) in the TB IC community level training. Facilitation support was provided by Ms. Stella Kirkendale, Mr. Amos Nota, Ms. Lynette Maambo (Ndola District Medical Office) and Mr. Sylvester Chanda (Provincial Medical Office, Central Province).

**PMDT:** TB CARE I KNCV regional consultant Dr. Victor Ombeka provided technical support to the NTP to reconstruct PMDT data at two referral hospitals, using the newly printed MDR-TB reporting and recording tools. The data reconstruction will help the NTP to provide MDR-TB patient data for the country. The revision of the national guidelines for the Programmatic Management of Drug Resistant Tuberculosis (PMDT) was completed this quarter by a sub-committee comprising the Ministry of Health staff, National TB control Program (NTP), the National Reference Laboratory, one Ndola Central Hospital MDR-TB ward supervisor, local TB CARE I partners and representatives from UNDP, USAID and CDC.

**TB/HIV**: TB CARE I provided support for 5 DOTS trainings for 122 community volunteers (68 males, 54 females). Training volunteers has proven cardinal as they assist the poorly staffed health care workers in identifying TB suspects who are subsequently screened for HIV once TB diagnosis is confirmed. Early diagnosis of both TB and HIV, with prompt treatment, is associated with better outcomes. Two district level TB/HIV collaborating body meetings were also held in Kitwe and Ndola districts. 77 health facility staff operating in different areas of lab, pharmacy, in and outpatient units and managers attended the two meetings in the Copper belt province. This province has the highest TB and HIV burdens among the TB CARE I supported provinces.

**3 Is implementation:** Preparatory work has been underway for the implementation of the WHO 3 I's project in four provinces in Zambia, in partnership with the Centre for Infectious Diseases Research in Zambia (CIDRZ). The partners developed a set of baseline assessment and monitoring tools this quarter. The tools have been reviewed by local and international technical staff from the Ministry of Health, TB CARE I, CDC and USAID. TB CARE I also conducted interviews for 16 staff positions under the 3 I's project. The positions include eight facility level laboratory officers, eight facility level TB/HIV technical officers and one senior clinical care officer who will be based in the Lusaka TB CARE I office.

**Health System Strengthening**: Two MoH and four TB CARE I staff members participated in the 43rd World Union conference held in Kuala Lumpur, Malaysia. The team participated in a number of key meetings organized by the Program Management Unit (PMU) during the conference. A poster presentation titled *'Selection of supervising laboratories for peripheral facilities in the EQA program for the Copperbelt Province of Zambia'* was also made by Robertson Chibumbya - TB CARE I Technical Officer Laboratory services.

**M&E, Operational Research (OR) and Surveillance:** Four draft protocols were developed by a team of MoH staf members, research staff from the University of Zambia and TB CARE I local and international partners by December 2013. The project plans to finalize the protocols for local ethical approval in the next quarter. The draft protocols are under the following themes: 1. What are the best strategies to promote and scale up integration of screening of HIV and TB amongst household contacts of smear positive TB patients? 2. What factors contribute to long turnaround time for sputum smear microscopy results for TB suspects and follow up patients? 3. Assessing barriers to timely screening and diagnosis of tuberculosis in prison inmates in Zambia, 4. Study to determine barriers in the Identification and referral of MDR-TB suspects for diagnosis in Zambia.

#### Overall work plan implementation status

82% of planned Year 2 project implementation was achieved by the end of this quarter. TB CARE I will complete the Year 2 activities during Year 3 of project implementation. TB CARE I was finalizing the Year 3 work plan submission following mission approval and review by USAID Washington.

#### Technical and administrative challenges

The project has not experienced any major challenges this quarter.

#### In-country Global Fund status and update

The NTP continues to recieve support from the United Nations Development Fund (UNDP) for implementation of Global Fund activities. Dr. Callistus Kaayunga, Dr. Mwendaweli Maboshe and Amos Nota from FHI360 Zambia, TB CARE I travelled to Nairobi, Kenya to attend a TBTEAM regional workshop on National Strategic Planning for Tuberculosis Control. The workshop was organized by WHO/AFRO/STB/Unit and WHO-HQ/HTM/STB/TSC Unit. Participants for the meeting were drawn from 28 African countries including Angola, Botswana, Burkina Faso, Burundi, Chad, Congo, Cote D'Ivoire, DRC, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Nigeria, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, The Gambia, Uganda, Zambia and Zimbabwe.

## **Quarterly Technical Outcome Report**

Technical Area	1. Universal and Early Acces	S						
Expected	Outcome Indicators	Baseli		Targe		Result	Highlights of the Quarter	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y2		the Target
1.1 Increased demand for and use of high quality TB services and improve the satisfaction with TB services provided (Population/Patient Centered Approach)	1.1.3 Patients' Charter is implemented Indicator Value: Score (0-3) based on definition	0	2011	2	2012	1	TB CARE I supported training of 24 health care workers and community volunteers from the two PCA planned intervention districts of Solwezi and Mwinilunga (10 females, 14 males) from December 4-8, 2012 in Solwezi. The 24 participated in the pre testing of data collection tools and PCA implementation tools. Collection of baseline data and entry of the quantitative component was done. The TB CARE I and ZPCT II M&E staff members worked with the KNCV data support expert during the data entry process. The implementation of the PCA tools will be done in the next quarter.	components, qualitative and quantitative data. The project managed to enter quantitative data and hopes to recieve guidance from the technical officer at KNCV responsible for the qualitative component in quarter two of project implementation. The PCA tools are planned for implementation in the next
1.2 Increased quality of TB services delivered among all care providers (Supply)	1.2.1 Appropriate tools from the PPM Toolkit is implemented Indicator Value: Score (0-3) based definition disaggregated by the tools selected by NTP.	0	2011	2	2012	1	The NTP was analyzing the survey findings this quarter and agreements with private providers will be made to harmonize their TB patient data with the national TB surveillance system.	Private service providers will be oriented in the use of national TB reporting and recording tools in the next quarter and support will be provided for them to adopt the tools.
	1.2.5 Private providers referring suspects to government facilities Indicator Value: Number Level: Score (Yes/No) Source: TB register Means of Verification: Numerator: Denominator:	Yes	2011	Yes	2012	Yes	The private providers have not yet been provided with reporting and recording tools to refer patient data to the NTP.	The NTP plans to provide repoting and recording tools from the next quarter

Technical Area	2. Laboratories							
Expected	Outcome Indicators	Baseli	ne	Targ	et	Result	Highlights of the Quarter	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y2		the Target
2.1 Ensured capacity, availability and quality of laboratory testing in country needed to support the diagnosis and monitoring of TB patients	2.1.2 Laboratories with working internal and external quality assurance programs for tests that they provide including: a) smear microscopy, b) culture, c) DST, and d) rapid molecular test Indicator Value: Percent Numerator: Number of laboratories enrolled in EQA program meeting description above both nationwide and TB CARE areas. Denominator: All laboratories (national and TB CARE areas separately) that perform one or more of the above TB diagnostics.	64% (national) 136/213	2011	100%	2012	100% (135/135 )	TB CARE I continued to support EQA for smear microscopy in 135 facilities in the six target provinces. TB CARE I laboratory officers provided technical support in Central and North Western provinces.	In order to improve the quality of EQA in the six target provinces, TB CARE I will support training of 15 laboratory supervisors on microscopy EQA performance analysis using the TB CARE I Laboratory ToolBox in February 2013.

availability and	2.2.2 SRLs that are meeting the terms of reference including conducting technical assistance visits and providing proficiency testing panels Indicator Value: Number of SRLs	1	2011	1	2012	1	The new Supra-National TB Reference Laboratory (SRL) of Kampala, Uganda sent proficiency panels in October 2012 to the National TB Reference Laboratory to assess staff performance in Culture/DST. The culture/DST panels were analysed and results sent to SRL.	The National TB Reference Laboratory is waiting for the report on proficiency panels tested.
	2.3.1 New technologies have been introduced Indicator Value: Number for each technique below by Central, Provincial, district and Peripheral levels 1. TB culture 2. First line DST 3. Second-line DST 4. HAIN MTBDRplus 5. GeneXpert 6. LED microscopy	TB culture (6) First line DST (6) Second- line DST (1) HAIN MTBDRplu s (2) GeneXpert (1) LED microscop y (12)	2011	TB culture (6) First line DST (6) Second- line DST (1) HAIN MTBDRplu s (3) GeneXpert (3) LED microscop y (20)	2012	First line DST (6) Second- line DST (1)	The Xpert MTB/RIF technical working group completed the first draft of the Xpert implementation plan pending submission to NTP for approval. The following key areas have been agreed upon: 1. objective of Xpert implementation, 2. eligible suspects for Xpert MTBRIF testing, 3. diagnostic algorithm, 4. Xpert M&E indicators and 5. site selection criteria.	A training of trainers in Xpert MTB/RIF has been scheduled for February 2013 during which 35 clinicians and 10 laboratory staff will be trained. Ms. Manuela Rehr, PMU Technical Officer Laboratory Services, has been invited to co-facilitate at this national workshop.

Technical Area	3. Infection Control							
Expected	Outcome Indicators	Baseli	ine	e Target		Result	Highlights of the Quarter Challenges and Next Steps to Re	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y1		the Target
3.2 Scaled-up implementation of TB-IC strategies	3.2.2 Key facilities with IC focal person, implementation plan, budget, and monitoring system Indicator Value: Percent Numerator: The number of selected categories of key facilities with all three (a+b+c) interventions in place. Denominator: Total number of key facilities of the selected categories	7%	2011	23% (10/44)	2012	35% (15/44)	The target for year two was reached and activity was completed. TB CARE I is waiting for year three workplan approval to continue facility IC support.	TB CARE I plans to support integration of TB IC to a minimum of 13 facilities. The project will also support baseline IC assessments in 29 health facilities and 8 prison facilities (In the 3 I's target facilities).
3.3 Strengthened TB IC Monitoring & Measurement	3.3.1 Annual reporting on TB disease (all forms) among HCWs is available as part of the national R&R system Indicator Value: Yes/No	No	2011	Yes	2012	No	Annual reporting on TB disease among health care workers is not part of the current NTP reporting system.	TB CARE I will learn from the Ndola District TB IC demonstration project and support the development of reporting tools to be part of the reporting and recording system

3.4 Improved TB-IC human resources	3.4.1 A team of trained trainers in TB IC is available Indicator Value: Yes/No	Yes	2011	Yes	2012	for three MoH staff members in the third	The regional training will only be conducted in the third quarter of project implementation in South Africa.

Expected	Outcome Indicators	Baseliı	ne	e Target		Result	Highlights of the Quarter Challenges and Next Steps to Re	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y2		the Target
4.1 Improved treatment success of MDR	4.1.2 MDR TB patients who are still on treatment and have a sputum culture conversion 6 months after starting MDR-TB treatment Indicator Value: Percent Numerator: Number of MDR TB patients in a cohort who are still on treatment and had culture conversion latest at month 6 (having had 2 negative sputum cultures taken one month apart and remained culture negative since) Denominator: Total number of MDR patients who started treatment in the cohort.	Not yet available	2011		2012	Data not yet available	Tender procedures for the renovation works for the two MDR-TB sites were completed and tender documents are currently under review by FHI360 HQ. Works may commence in the next quarter.	The MoH tender documentation has required detailed review by TB CARE I/FHI360 HQ to verify conformity with USAID requirements through the Contracts Management Services (CMS) department. This process will influence the finalization of renovation contracts and beginning of renovation works.
	4.1.4 MDR TB patients who have completed the full course of MDR TB treatment regimen and have a negative sputum culture Indicator Value: Percentage Numerator: Number of MDR TB patients in a cohort who completed a course of MDR treatment and who fit the WHO criteria for cure or completed treatment Denominator: Total number of MDR patients who started treatment in the cohort	data not yet available	2011		2012	Data not	Dr. Victor Ombeka, KNCV regional consultant, provided technical support to the NTP to reconstruct PMDT data using the newly printed reporting and recording tools. The NTP M&E Officer will provide the patient data from the two hospitals that participated in this process.	The NTP is expected to provide patient data on PMDT in the next quarter.

Technical Area	5. TB/HIV							
Expected	Outcome Indicators	Basel	ine	Targ	Target		Highlights of the Quarter	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y2		the Target
5.2 Improved diagnosis of TB/HIV co-infection	5.2.2 TB patients with known HIV status Indicator Value: Percent Numerator: Total number of all TB patients registered over a given time period who were tested for HIV (after giving consent) during their TB treatment Denominator: Total number of TB patients registered over the same given time period.	83	2011	85	2012	83	TB CARE I supported two district TB/HIV coordinating body meetings in Kitwe and Ndola, Copperbelt province with 35 participants in Ndola (21 males, 14 females) and in Kitwe (10 males, 32 females). Facilities within the two districts shared their successes and challenges in treating TB patients co-infected with HIV. The meetings provided a forum for peer to peer sharing and also enabled the district medical office to audit all registers for TB/HIV co-infected patients from the participating facilities. Through these meetings, TB CARE I was able to identify areas in TB/HIV that require more strengthening.	

Indicator Value: Numerator: Tota patients register period who test giving consent) treatment Denominator: To patients register	al number of all TB red over a given time HIV-positive (after during their TB otal number of TB red over the same of who are tested for	65	2011	2012	65	TB CARE I provided DOTS training to 122 community volunteers using reprogrammed funds, from the following districts: 25 community volunteers working in HIV care and treatment settings from Kapiri Mposhi, Central Province (15 females, 10 males), 25 from Kalulushi, Copperbelt Province (14 females and 11 males), 23 from Lufwanyama, Copperbelt Province (11 females and 12 males), 25 from Mansa, Luapula Province (8 females and 17 males) and 24 from Mwense, Luapula Province (6 females and 18 males). Training volunteers has proven cardinal as they have supplemented health care worker efforts in identifying TB suspects who are subsequently screened for HIV once TB diagnosis is confirmed. Early diagnosis of both conditions with prompt treatment is associated with better outcomes.	TB CARE I plans to support an additional six trainings in the next quarter with year two carry-over funds.
for HIV Indicator Value: Numerator: Tota suspects registe period tested for consent). Denominator: To	al number of all TB red over a given time r HIV (after giving otal number of TB red over the same	78	2011	2012		Activity completed in the previous quarter.	TB CARE I will equip 26 health care workers including prison HCWs with basic ART skills during year three of project implementation.

<b>Technical Area</b>	6. Health Systems Strengthe	ning						
Expected	Outcome Indicators	Baseli	ne	Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y2		the Target
	6.2.3 People trained using TB CARE funds Indicator Value: Number of people Numerator: Number of people trained disaggregated by gender and type of training.					trained in Year 2	271 were trained through TB CARE I support. The following trainings were successfully held by program area: Universal Access training in WHO TB modules; 122 (54 female, 68 male). PCA implementers training; 24 (10 female, 14 male). Training in Community TB IC	TB CARE I will continue to support staff trainings in key focus areas in the next year.
formed integral part of national plans, strategies and service delivery of these components							Simplified Checklist; 48 (28 female, 20 male). TB HIV meetings 77 (46 female, 31 male)	
		115	2011	656	2012			

	echnical Area 7. M&E, OR and Surveillance							
Expected	Outcome Indicators	Baseli	ne	Target		Result	Highlights of the Quarter	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y1		the Target
TB surveillance	7.1.2 Diagnosed cases captured by routine surveillance system Indicator Value: Percent Numerator: Number of cases in the routine surveillance system Denominator: Total number of cases in the routine surveillance system including laboratory and clinical diagnostic registers including in private sector.	73	2011	85	2012		A national launch and media briefing for the prevalence survey was held on November 13, 2012 and the Minister of Health was the key representative of the launch. Pre survey visits were conducted by the steering committee members in all planned sampling sites, in November 2012. The SOPs for the survey were prepared in November 2012 by the steering committee and TB CARE I staff were part of the committee. A tender selection committee meeting was held in December 2012 for the digitalization of the three X-ray machines planned for use in the survey.	The prevalence survey implementation will require procurement of laboratory equipment and supplies which will be procured once the year three workplan is approved. TB CARE I will continue to participate and support the prevalence survey activities.
capacity of NTPs to analyze and use	7.2.3 A data quality audit at central level has been conducted within the last 6 months Indicator Value: Yes/No					No	The data quality audit was not conducted in this quarter because of conflicting priorities from the NTP. An audit is planned for in the next quarter.	The USAID mission in Zambia plans to conduct the data quality audit in January 2013 with the NTP.
		Yes	2011	Yes	2012			
capacity of NTPs to perform operational research	7.3.2 Number of staff trained in proposal writing Description: Indicator Value:number Numerator: number of staff trained in operational research	None	2011		2012	No	Four draft protocols have been developed under the following themes: 1. What are the best strategies to promote and scale up integration of screening of HIV and TB amongst household contacts of smear positive TB patients? 2. What factors contribute to long turnaround time for sputum smear microscopy results for TB suspects and follow up patients? 3. Assessing barriers to timely screening and diagnosis of tuberculosis in prison inmates in Zambia, 4. Study to determine barriers in the Identification and referral of MDR-TB suspects for diagnosis in Zambia.	

Expected	8. Drug supply and managen Outcome Indicators	Baseli	line Target		et	Result	Highlights of the Quarter	Challenges and Next Steps to Reach
Outcomes		Data	Year	Data	Year	Y2		the Target
8.1 Ensured	8.1.1 Quarterly national stock					over 12	This budget line was reprogrammed and	New activities to be implemented in year
nationwide	information available					months	activities planned for carry over into year	three following workplan approval
systems for a	Indicator Value: Number (as months					(FLD)	three and will be implementated after	
sustainable supply	of stock for FLDs and SLDs separately)						receipt of USAID approval of APA3 work	
of anti-TB drugs							plan.	
		12 months		12 months				
		(FLD)	2011	(FLD)	2012			

## **Quarterly Activity Plan Report**

1. Univers	sal and	Early Access				Planr Comple		
Outcome	Activity #	Activity	Leader	Budget	Cumulative Completion	Month		Cumulative Progress and Deliverables up- to-date
1.1 Increased demand for and use of high quality TB services and improve the satisfaction with TB services provided	1.1.1	Orient stakeholders on the patient centered approach	FHI 360		100%	Aug	2012	Orientation of stakeholders from the North Western province where the Patient Centered Approach was planned for implementation was done in August 2012. Following the orientation meeting, 12 health care workers (5 females and 7 males) and 12 community volunteers (5 females and 7 males) from the planned intervention sites (Mwinilunga and Solwezi) were trained in December 2012, in readiness to start implementing the intervention.
(Population/P atient Centered Approach)	1.1.2	Conduct data collection and analysis on adapted tools	FHI 360	30.507	<b>7</b> 5%	Feb	2013	Baseline data collection took place in October 2012 in the three target districts of Solwezi, Mwinilunga (intervention districts) and Kabompo (control district). This data is being captured by TB CARE I and ZPCT II M&E staff using Epi data software for the quantitative component. The qualitative data analysis will take place in quarter two of year three.
	1.1.3	Supervise data analysis	FHI 360		<b>2</b> 5%	Feb	2013	The process of baseline data analysis has begun with staff entering data on the quantitative component.
	1.1.4	Participate in patient centered approach regional workshop	FHI 360	4.417	<b>0</b> %	Feb	2013	This activity is scheduled for March 2013 in Mozambique for all countries implementing the PCA.
Outcome	Activity #	Activity	Activity Leader	Budget	<b>Cumulative Completion</b>	Month	Year	Cumulative Progress and Deliverables up- to-date
1.2 Increased quality of TB services delivered among all		Support enhanced management of pediatric TB	WHO	11.300	75%	Apr		No activities related to management of paediatric TB were conducted this quarter. TB CARE I will support training of 50 health care providers in the updated paediatric guidelines in the next quarter.
providers		Provide private practitioners with TB surveillance tools	WHO	11.300	75%	May	2013	Surveillance tools to be provided next quarter.

upply) <b>1.2.3</b>	Support orientation of private	WHO	23.391	0%	May	2013	No activities were conducted in this quarter.
	practitioners in data management						TB CARE I will support training 50 private
							sector practitioners in TB data management
							in the next quarter.
1.2.4	Support CB-DOTS program	FHI 360	3.897	100%	Mar		Activity completed.
1.2.5	Provide technical support to NTP in program management	KNCV	74.093	25%	Jun	2012	The consultant had to cancel her mission at the last moment due to health problems. Nevertheless a stakeholders meeting was held in October 2012. Participants included the civil society, community based organizations and faith based organizations. Plans have been made this quarter with the NTP and an ACSM consultant is expected to provide technical support in the next quarter.
1.2.6	Develop ACSM strategy	WHO	63.031	100%	Dec		A meeting was held for 20 participants from December 26- 31 by the NTP and a draft strategy was developed.
1.2.7	Enhance community participation in ACSM	FHI 360	29.747	0%	Dec	2012	This activity under ACSM will be implemented in the second quarter of project implementation, following finalization of the ACSM strategy.
1.2.8	Re-orientation of health care workers in TB control	WHO	120.721	100%	Sep	2012	Activity completed in the previous quarter.
1.2.9	Training of HCW in ACSM	FHI 360	22.025	0%	Mar	2013	Training of health care workers will be done in the second quarter of APA 3.
1.2.10	Situational analysis on ACSM	FHI 360	13.379	0%	Mar		The situational analysis will conducted in the second quarter of APA 3.
1.2.11	ACSM operational plan development	FHI 360	8.508	0%	Mar		The operational plan will be developed after the situational analysis is conducted.
1.2.12 M	Support 5 day training for 150 community volunteers in DOTS (25 participants per training)	FHI 360	88.462	75%	Mar	2013	TB CARE I supported the training of 72 community volunteers in 3 TB DOTS trainings (31 females and 41 males) with reprogrammed funds. The trainings were conducted in the following districts: Kalulushi, Lufwanyama and Mwense districts

2. Laboratories		Planned	
		Completion	

Outcome	Activity	Activity	_		Cumulative	Month	Year	Cumulative Progress and Deliverables up-
2.4.5	#		Leader	Budget	Completion		2012	to-date
2.1 Ensured	2.1.1	Strengthen laboratory services and	FHI 360	/0.38/	<b>1</b> 00%	Sep	2012	Activity completed
capacity, availability		systems through training in LED microscopy						
and quality of	2.1.2	Support the implementation of the	FHI 360	92.971	<b>2</b> 75%	Jun	2013	The baseline assessment planned for Eastern
laboratory testing in		National Courier System for the referral of TB specimens						province was conducted this quarter and agreements to develop SOPs, begin
country		or 15 specimens						implementation in four pilot sites and train 30
needed to								laboratory staff in the use of the SOPs were
support the								included in the year three workplan.
diagnosis and	2.1.3	Support external quality assessment	FHI 360	136.756	<b>1</b> 00%	Sept	2012	EQA conducted this quarter in 135 facilities
monitoring of TB patients		(EQA) implementation						with savings from the year two workplan budget.
TD patients	2.1.4	Conduct follow up visits after EQA	FHI 360	55.764	Cancelled	Sept	2012	Funds for this activity were reprogrammed to
		implementation				·		support other TB CARE I activities.
	2.1.5	Develop Culture EQA	MSH	26.589	<b>2</b> 5%	Apr	2013	The development of the culture DST
			EUT 060	24.027	1000/	7.1	2012	guidelines will be done in APA 3.
	2.1.6	Strengthen laboratory staff biosafety skills	FHI 360	34.027		Jul	2012	Activity completed in the last quarter.
	2.1.7	Support smear preparation at non-	FHI 360		<b>5</b> 0%	Feb	2013	Following the baseline assessment which was
		diagnostic sites						was conducted in Mumbwa and Serenje districts of Central province last quarter, a
								training of staff will be conducted in APA3.
Outcome	Activity	Activity	Activity	Approved	Cumulative	Month	Year	Cumulative Progress and Deliverables up-
	#		Leader	Budget	Completion			to-date
2.2 Ensured	2.2.1	Provide national and provincial level	KNCV	106.858	<b>2</b> 5%	May	2013	Dr. Valentina Anisimova's provided technical
the availability		technical support						support to TDRC regional TB reference laboratory from October 7 - 22, 2012 with a
and quality of								focus on strengthening the lab culture, DST
technical								and quality mangement systems.
assistance	2.2.2	Build capacity for laboratory staff from	FHI 360	91.981	<b>0</b> %	May	2013	This activity has been planned to take place
and services	2.2.2	culture facilities	EUT 260	40.330	1000/	Manak	2012	in APA 3.
	2.2.3	Equip laboratory staff with skills in new diagnostics	FHI 360	48.228		March		Activity completed
	2.2.4	Support national laboratory meeting	FHI 360		<b>1</b> 00%	Sep		Activity completed
Outcome	Activity	Activity	_	• •	Cumulative	Month	Year	Cumulative Progress and Deliverables up-
	#		Leader	Budget	Completion			to-date

2.3 Ensured optimal use of new approaches to the laboratory confirmation	2.3.1	Procure diagnostic equipment	FHI 360	85.867	100%	June	Activity completed: A technical working group was established to coordinate and plan all activities for Xpert implementation and routine use and provide the country strategy for GeneXpert use. The strategic plan is being developed to guide on the effective utilization of the GeneXpert MTB/RIF.
of TB and	2.3.2 M	Procure lab supplies (including MOT)	FHI 360	50.561	100% <b>73%</b>	Apr	Activity completed last quarter.

3. Infectio	n Cont	rol				Planı Comple		
Outcome	Activity #	Activity	Activity Leader	Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up- to-date
3.2 Scaled-up implementati on of TB-IC strategies		Incorporate TB IC into health facility general infection control plans	FHI 360	24.161	<b>1</b> 00%	Sept.	2012	Activity completed according to year two workplan and budget. TB CARE I supported the integration of TB IC to 15 facilities over the targeted 10 facilities for year 2. TB CARE I will support integration of TB IC to 13 new facilities.
		Enhance safe TB IC work practices in MDR-TB treatment sites	FHI 360	22.133	75%	Mar	2013	A TB IC training will be conducted with local partners in the next quarter.
		Enhance the use of available space to maximize TB IC measures	FHI 360	50.000	75%	Mar	2013	Renovation works commenced in four of the five selected sites in October 2012. The four sites are Kabwe General Hospital OPD, Kawama Clinic (Kitwe), Clinic 1 (Chingola) and Mishikishi Clinic (Masaiti). All works will be completed in the next quarter as they are all at an average of 70% complete. The MoH began the tender procedures for the Chest Diseases Laboratory (CDL) incinerator housing in December 2012. The renovation works for this incinerator housing will be completed in the next quarter.
		Provide technical assistance in TB IC at facility level	KNCV	20.475	50%	Dec	2012	KNCV consultant Max Meis provided technical support in September 2012 to the demonstration project. The support by Jerod Scholten to build provincial staff capacity was cancelled.
Outcome	Activity #	Activity	Activity Leader	Approved Budget		Month	Year	Cumulative Progress and Deliverables up- to-date

3.4 Improved TB-IC human resources		Build provincial level staff capacity in TB IC through regional training	FHI 360	29.552	100%	Jul	Activity complete for year three workplan and budget: TB CARE I will support IC training for three MoH staff members in the third quarter in year three.
	3.4.2	Enhance provincial level staff capacity in TB IC through local training	KNCV	4.450	25%	Dec	The training is planned to take place in the first quarter of APA 3. Planning is underway to include laboratory staff.
	3.4.3 M	3 day training for 75 community volunteers in community TB IC package (25 participants per training) (MOT)	FHI 360	19.829	75%	Apr	48 community volunteers (28 females and 20 males) under went training in community TB IC in 2 trainings held in Kabwe and Kitwe. A training is planned for Mkushi district in February 2013 with the reprogrammed funds.
					71%		

4. PMDT	4. PMDT					Plant Comple		
Outcome	Activity #	Activity	Activity Leader	Budget	<b>Cumulative Completion</b>	Month	Year	Cumulative Progress and Deliverables up- to-date
4.1 Improved treatment success of MDR		Rehabilitate infrastructure for management of multi-drug resistant (MDR-TB) TB patients	FHI 360	623.382	<b>5</b> 75%	Jun	2013	The tender procedures for rehabilitation works at UTH and Kabwe General Hospitals by the MOH central level are complete and documents are currently under review by FHI360 HQ.
		Provide technical assistance in MDR-TB facilities on TB IC	KNCV	43.626	50%	Oct	2012	Dr. Victor Ombeka provided technical support to the NTP for PMDT and made visits to the MDR-TB treatment sites where data collection on MDR-TB patients was reorganized with standard recording and reporting tools.
	4.1.3	Procure personal protective equipment	FHI 360	8.100	<b>1</b> 00%	March	2012	Activity completed. Respirators were procured
					<b>75%</b>			

5. TB/HIV					Plani			
						Comple	etion	
Outcome	Activity	Activity	Activity	Approved	Cumulative	Month	Year	Cumulative Progress and Deliverables up-
	#		Leader	Budget	Completion			to-date

5.2 Improved diagnosis of TB/HIV co-infection	5.2.1	Strengthen district and health facility level TB/HIV coordinating bodies	FHI 360	98.982		100%	Dec		TB CARE I provided support to two district level TB/HIV coordinating body meetings held in Kitwe and Ndola with 77 partcipants (46 females and 31 males).
		Enhance health care worker involvement in community TB and HIV services	WHO	99.440		100%	Dec	2012	Activity completed in the previous quarter.
		Enhance community involvement in TB case finding efforts among HIV infected persons	FHI 360	61.754		75%	Dec		50 community volunteers working in HIV care and treatment settings (23 females and 27 males) were trained in DOTS in Kapiri Mposhi and Mansa districts.
	5.2.4	Intensify TB screening in HIV prevention, care and treatment points	FHI 360	5.261		100%	Sept.	2012	Activity completed.
	5.2.5	Training in provider initiated HIV counseling and testing	FHI 360	38.902		100%	March	2012	Activity completed.
	5.2.6	Procure facility equipment for renovated TB clinic	FHI 360	8.962		100%	March	2012	Activity completed.
					0	96%			

6. Health	6. Health Systems Strengthening						ned etion	
Outcome	Activity #	Activity	Activity Leader	Budget			Year	Cumulative Progress and Deliverables up- to-date
6.2 TB control components (drug supply	6.2.1	Support World TB Day commemoration	WHO	11.300	100%	March	2012	Activity completed under year two workplan and budget. TB CARE I will provide support for the World TB Day commemoration in year three in March 2013
and management, laboratories, community		Strengthen human capacity efforts in TB control	FHI 360	27.854	100%	Nov	2012	Activity completed. Four TB CARE I staff and two MoH staff participated in the Union Conference in November 2012 in Kuala Lumpar in Malaysia with project support.
care, HRD and M&E) formed		Strengthen staff knowledge in required rules and regulation	FHI 360	40.104	<b>1</b> 00%	Mar	2012	Activity completed
integral part	6.2.4	Participate in provincial planning	FHI 360	10.944	100% 100%	Sept.	2012	Activity completed

7. M&E,	7. M&E, OR and Surveillance					Planı Comple		
Outcome	Activity #	Activity	Activity Leader	• •	Cumulative Completion		Year	Cumulative Progress and Deliverables up- to-date

7.1 Strengthened TB		Strengthen provincial data quality through provincial technical review meetings	WHO	169.500	<b>1</b> 00%	Sept.	2012	Activity completed.
surveillance	7.1.2	Strengthen monitoring and evaluation through national, provincial, and district supervisory visits	WHO	56.500	<b>1</b> 00%	Sept.	2012	Activity completed.
	7.1.3	Support availability of national key strategic documents for TB control	WHO	22.600	<b>1</b> 00%	June	2012	Activity completed.
Outcome	Activity #	Activity	Activity Leader	Approved Budget	Cumulative Completion	Month	Year	Cumulative Progress and Deliverables up- to-date
7.2 Improved capacity of	7.2.1	Strengthen national data quality through annual national review meeting	FHI 360	38.970	<b>1</b> 00%	March.	2012	Activity completed.
/ -		)						
Outcome	Activity #	Activity	Activity Leader	Approved Budget		Month	Year	Cumulative Progress and Deliverables up- to-date
	_		_	Budget	Completion	Month Sept.		-
Outcome  7.3 Improved capacity of	#	Activity	Leader	Budget	Completion 75%		2013	to-date  Draft protocols were developed this quarter for the four focus areas of operations

8. Drug supply and management						Planr Comple		
Outcome	Activity #	Activity	Activity Leader	Approved Budget	<b>Cumulative Completion</b>	Month	Year	Cumulative Progress and Deliverables up- to-date
8.1 Ensured nationwide		Provide technical assistance to the NTP in drug management	KNCV	19.748	100%	Sept.	2012	Activity completed.
systems for a sustainable supply of anti-	01112	Procure first-line drugs	FHI 360	1.000.000	Cancelled	Sept.		Funds reprogrammed to procure equipment to support national prevalence survey and new diagnostics (LED microscopes)
			-		100%			

## **Quarterly MDR-TB Report**

Country
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Period October-December 201	.2
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## MDR TB cases diagnosed and put on treatment in country

Quarter	Number of MDR cases diagnosed	Number of MDR cases put on	
Jan-Dec 2010	118	Unknown	
Jan-Sep 2011	93	48	
Oct-Dec 2011			
Total 2011	93	48	
Jan-Mar 2012	24	10	
Apr-Jun 2012	20	8	
Jul-Sep 2012			The NTP did not provide data this quarter and planned for data reconstruction in October 2012
Oct-Dec 2012			The NTP was not able to provide data this quarter because of the reconstruction process underway
Total 2012	44	18	,

Reporting tools for MDRTB have been developed.TB CARE I and NTP will conduct a data reconstruction process to determine the number of MDR TB patients who started treatment in the cohort.

#### **Quarterly Photos**



TB CARE I staff at a planning meeting, Ibis Gardens, November 7—9, 2012. From left to right is Amos Nota (Technical Officer-TB/HIV), Evans Mainza (Senior Finance Manager), Chitambeya Mukwangole (Technical Officer-TB IC), Paul Sichalwe (Senior Program Officer) Dr. Grace Kahenya (Senior Technical Advisor-Laboratory Services, MSH), Dr. Henry Phiri (Senior Program Advisor), Bernard Sichinga (Technical Officer-M&E) and Robertson Chibumbya (Technical Officer-Laboratory Services)



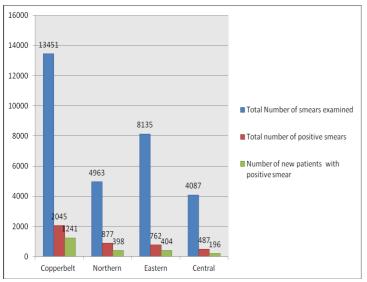
Renovation works being done at Kawama Clinic in Kitwe, Copperbelt province, to enhance TB infection control environmental measures by increasing the window sizes to improve natural ventilation



PCA data collection team led by Bernard Sichinga-Technical Officer M&E, paying a courtesy call to the headwoman at Manyinga village, Manyinga district, North Western province during interview of TB patients exercise in October 2012



TB CARE I staff Robertson Chibumbya making a poster presentation at the Union Conference in Kuala Lumpur, Malaysia November 2012. The title of the poster was: Selection of supervising laboratories for peripheral facilities in the EQA program for the Copperbelt Province of Zambia.



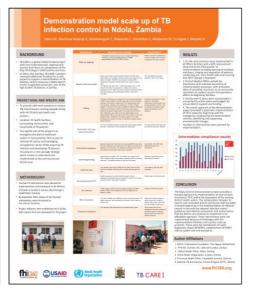
The graph above represents comparison of data for four pilot provinces participating in a National Courier System for the referral of TB specimens. The data includes the number of smears examined, number of positive smears and new patients with positive TB smears in the four pilot provinces. Copper belt province has the highest number of smears done and positives this is due to high incidence of TB and co infection with HIV.



TB CARE I staff with partners at the Union Conference, Kuala Lumpur, Malaysia, November 2012. From left to right, Seraphine Kaminsa Kabanje, Robertson Chibumbya, Dr. Mwendaweli Maboshe (WHO TB Technical Advisor), Rose Masilani (Senior Health Promotions Officer, Ministry of Health), Chitambeya Mukwangole and David Siamutondo (JATA-MOF Project)







The three posters above were presentations made at the Infection Control Africa Network (ICAN) conference held in Cape Town from November 26-29 2012. The three presentations were made by Joackim Longwe (Senior Infrastructure Officer-Ministry of Health, Copperbelt Provincial Medical Office), Amos Nota (Technical Officer-TB/HIV, TB CARE I) and Seraphine Kaminsa Kabanje (Project Director, TB CARE I)

## **Inventory List of Equipment - TB CARE I**

Organization:	TB CARE I
Country:	Zambia
Reporting period:	October-December 2012
Year:	APA 2





Description (1)	ID numbers (2)	Acquisition date (3)	Acquisition cost (4)	V.A.T (5)	Location (6)	Condition (7)	Disposition date (8)	Title held by (9)	Insurance Policy #
GENE XPERT MACHINE	801639	February 10, 2012	\$23.191,70		CDL LUSAKA	Good		FHI360	P/01/1014/045922/201
GENE XPERT MACHINE	801638	February 10, 2012	\$23.191,70		LUSAKA	Good		FHI360	P/01/1014/045922/201
EXAMINATION COUCH	FHI/TBCL ME 029	March 29, 2012	\$353,16		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
EXAMINATION COUCH	FHI/TBCL ME 030	March 29, 2012	\$353,16		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
EXAMINATION COUCH	FHI/TBCL ME 031	March 29, 2012	\$353,16		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
EXAMINATION COUCH	FHI/TBCL ME 032	March 29, 2012	\$353,16		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
EXAMINATION COUCH	FHI/TBCL ME 033	March 29, 2012	\$353,16		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
XRAY VIEWING BOX	FHI/TBCL ME 034	March 29, 2012	\$139,41		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
XRAY VIEWING BOX	FHI/TBCL ME 035	March 29, 2012	\$139,41		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
XRAY VIEWING BOX	FHI/TBCL ME 036	March 29, 2012	\$139,41		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
XRAY VIEWING BOX	FHI/TBCL ME 037	March 29, 2012	\$139,41		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
XRAY VIEWING BOX	FHI/TBCL ME 038	March 29, 2012	\$139,41		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
BEDSIDE SCREENS	FHI/TBCL ME 039	March 29, 2012	\$176,58		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
BEDSIDE SCREENS	FHI/TBCL ME 040	March 29, 2012	\$176,58		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
BEDSIDE SCREENS	FHI/TBCL ME 041	March 29, 2012	\$176,58		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201
BEDSIDE SCREENS	FHI/TBCL ME 042	March 29, 2012	\$176,58		NDOLA - Chest Disease Clinic	Good		FHI360	P/01/1014/045922/201

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BEDSIDE SCREENS	FHI/TBCL ME 043	March 29, 2012	\$176,58	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/045922/201
DELL LATITUDE E6320 Laptop	FX18BS1	April 10, 2012	\$1.857,31	Ndola Office	Good	FHI360	P/01/1007/045858/201
DELL LATITUDE E6320 Laptop	4GS8BS1	April 10, 2012	\$1.857,31	Ndola Office	Good	FHI360	P/01/1007/045858/201
DELL LATITUDE E6320 Laptop	7GS8BS1	April 10, 2012	\$1.857,31	LUSAKA	Good	FHI360	P/01/1007/045858/201
DELL LATITUDE E6320 Laptop	9Y18BS1	April 10, 2012	\$1.857,31	LUSAKA	Good	FHI360	P/01/1007/045858/201
HP LASERJET M3035MFP	CNRTCH096	April 10, 2012	\$2.839,11	LUSAKA	Good	FHI360	P/01/1007/045858/201
LCD PROJECTOR	EYJBU01001112002 D5592B	April 10, 2012	\$656,25	LUSAKA	Good	FHI360	P/01/1007/045858/201
BOOK SHELVES	FHI/TBCL OF 094	April 24, 2012	\$200,78	Ndola Office	Good	FHI360	P/01/1014/046772/201
BOOK SHELVES	FHI/TBCL OF 095	April 24, 2012	\$200,78	Ndola Office	Good	FHI360	P/01/1014/046772/201
BOOK SHELVES	FHI/TBCL OF 096	April 24, 2012	\$200,78	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
BOOK SHELVES	FHI/TBCL OF 097	April 24, 2012	\$200,78	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
WAITING BENCHES	FHI/TBCL OF 098	April 24, 2012	\$105,17	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
WAITING BENCHES	FHI/TBCL OF 099	April 24, 2012	\$105,17	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
WAITING BENCHES	FHI/TBCL OF 100	April 24, 2012	\$105,17	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
WAITING BENCHES	FHI/TBCL OF 101	April 24, 2012	\$105,17	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 056	May 3, 2012	\$448,36	LUSAKA	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 057	May 3, 2012	\$442,61	LUSAKA	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 058	May 3, 2012	\$442,61	LUSAKA	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 059	May 3, 2012	\$277,27	LUSAKA	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 060	May 3, 2012	\$277,27	LUSAKA	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 061	May 3, 2012	\$277,27	LUSAKA	Good	FHI360	P/01/1014/046772/201
OFFICE DESK	FHI/TBCL OF 062	May 3, 2012	\$277,27	LUSAKA	Good	FHI360	P/01/1014/046772/201

FUI/TROL OF 002		1				
FHI/TBCL OF 063	May 3, 2012	\$277,27	Ndola Office	Good	FHI360	P/01/1014/046772/201
FHI/TBCL OF 064	May 3, 2012	\$277,27	Ndola Office	Good	FHI360	P/01/1014/046772/201
FHI/TBCL OF 065	May 3, 2012	\$156,60	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
FHI/TBCL OF 066	May 3, 2012	\$156,60	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
FHI/TBCL OF 067	May 3, 2012	\$156,60	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
FHI/TBCL OF 068		\$156,60	NDOLA - Chest Disease Clinic	Good	FHI360	P/01/1014/046772/201
					FHI360	P/01/1014/046772/201
					FHI360	P/01/1014/046772/201
						P/01/1014/046772/201
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						P/01/1014/046772/201
						P/01/1014/046772/201
						P/01/1014/046772/201
FHI/TBCL OF 077					FHI360	P/01/1014/046772/201
						P/01/1014/046772/201
						P/01/1014/046772/201
			Ndola Office			P/01/1014/046772/201
			Ndola Office			P/01/1014/046772/201
			Ndola Office			P/01/1014/046772/201
						P/01/1014/046772/201
						P/01/1014/046772/201
	FHI/TBCL OF 065 FHI/TBCL OF 066	FHI/TBCL OF 064 May 3, 2012  FHI/TBCL OF 065 May 3, 2012  FHI/TBCL OF 066 May 3, 2012  FHI/TBCL OF 067 May 3, 2012  FHI/TBCL OF 068 May 3, 2012  FHI/TBCL OF 069 May 3, 2012  FHI/TBCL OF 070 May 3, 2012  FHI/TBCL OF 071 May 3, 2012  FHI/TBCL OF 072 May 3, 2012  FHI/TBCL OF 073 May 3, 2012  FHI/TBCL OF 074 May 3, 2012  FHI/TBCL OF 075 May 3, 2012  FHI/TBCL OF 076 May 3, 2012  FHI/TBCL OF 077 May 3, 2012  FHI/TBCL OF 078 May 3, 2012  FHI/TBCL OF 079 May 3, 2012  FHI/TBCL OF 079 May 3, 2012  FHI/TBCL OF 080 May 3, 2012  FHI/TBCL OF 081 May 3, 2012  FHI/TBCL OF 082 May 3, 2012  FHI/TBCL OF 082 May 3, 2012  FHI/TBCL OF 082 May 3, 2012  FHI/TBCL OF 083 May 3, 2012	FHI/TBCL OF 064 May 3, 2012 \$277,27  FHI/TBCL OF 065 May 3, 2012 \$156,60  FHI/TBCL OF 066 May 3, 2012 \$156,60  FHI/TBCL OF 067 May 3, 2012 \$156,60  FHI/TBCL OF 068 May 3, 2012 \$156,60  FHI/TBCL OF 069 May 3, 2012 \$156,60  FHI/TBCL OF 070 May 3, 2012 \$156,60  FHI/TBCL OF 071 May 3, 2012 \$156,60  FHI/TBCL OF 072 May 3, 2012 \$156,60  FHI/TBCL OF 073 May 3, 2012 \$156,60  FHI/TBCL OF 074 May 3, 2012 \$156,60  FHI/TBCL OF 075 May 3, 2012 \$156,60  FHI/TBCL OF 076 May 3, 2012 \$156,60  FHI/TBCL OF 077 May 3, 2012 \$156,60  FHI/TBCL OF 078 May 3, 2012 \$156,60  FHI/TBCL OF 079 May 3, 2012 \$156,60  FHI/TBCL OF 079 May 3, 2012 \$156,60  FHI/TBCL OF 079 May 3, 2012 \$156,60  FHI/TBCL OF 080 May 3, 2012 \$156,60  FHI/TBCL OF 081 May 3, 2012 \$156,60  FHI/TBCL OF 082 May 3, 2012 \$156,60  FHI/TBCL OF 082 May 3, 2012 \$156,60  FHI/TBCL OF 082 May 3, 2012 \$157,82  FHI/TBCL OF 083 May 3, 2012 \$197,82	FHI/TBCL OF 064         May 3, 2012         \$277,27         Ndola Office           FHI/TBCL OF 065         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 066         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 067         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 068         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 069         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 070         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 071         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 073         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 073         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 074         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 075         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 076         May 3, 2012         \$156,60         NDOLA - Chest Disease Clinic           FHI/TBCL OF 078         May 3, 2012         \$	FHI/TBCL OF 064	FHI/TBCL OF 064

SWIVEL CHAIR	FHI/TBCL OF 085	May 3, 2012	\$197,82	LUSAKA	Good	FHI360	P/01/1014/046772/201
SWIVEL CHAIR	FHI/TBCL OF 086	May 3, 2012	\$197,82	LUSAKA	Good	FHI360	P/01/1014/046772/201
SWIVEL CHAIR	FHI/TBCL OF 087	May 3, 2012	\$197,82	LUSAKA	Good	FHI360	P/01/1014/046772/201
SWIVEL CHAIR	FHI/TBCL OF 088	May 3, 2012	\$197,82	LUSAKA	Good	FHI360	P/01/1014/046772/201
LOCKABLE CABINET	FHI/TBCL OF 089	May 3, 2012	\$362,66	Ndola Office	Good	FHI360	P/01/1014/046772/201
LOCKABLE CABINET	FHI/TBCL OF 090	May 3, 2012	\$362,66	Ndola Office	Good	FHI360	P/01/1014/046772/201
LOCKABLE CABINET	FHI/TBCL OF 091	May 3, 2012	\$362,66	LUSAKA	Good	FHI360	P/01/1014/046772/201
LANDCRUISER HARDTOP	1HZ-0685650	May 11, 2012	\$45.985,15	LUSAKA	Good	FHI360	3031120005175
LANDCRUISER HARDTOP	1HZ-0685909	May 11, 2012	\$45.985,15	Ndola	Good	FHI360	3031120005175

- (1) Description of equipment: transportation (vehicles), administration (computers, faxes), laboratory equipment or others
- (2) Identification number (eg Manufacturer's serial number, model number, Federal stock number, national stock number)
- (3) Date of invoice
- (4) Total price including any sales tax paid. Use currency on invoice
- (5) Note any sales tax charged
- (6) Address
- (7) Good/fair or bad
- (8)+(9) Ultimate disposition data, (in the case of a vehicle) including date of disposal and sales price or the method used to determine current fair market value. where a recipient compensated TB CARE I for its share. Attach supplementary info